Banking SMEs around the world:

Lending practices, business models, drivers and obstacles

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Abstract

Using newly gathered data from 91 banks in 45 countries, we document the state of financing to SMEs by large banks around the world: we characterize the extent, type, and pricing of this financing; we describe banks' business models and lending practices; and we examine the factors driving and impeding bank lending to SMEs, including analyzing the role of government programs to promote SME financing and of banking regulations. Our results indicate that banks in both developed and developing countries are actively serving SMEs. However, we uncover surprisingly small differences when we compare SME versus large firm banking terms and lending practices. Instead, we find significant differences in lending terms and practices between banks operating in developed and developing countries. Also, while banks in developed countries see competition as a major obstacle, banks in developing countries point mainly to macroeconomic conditions. Banks' reaction to government support programs is positive overall and prudential regulations do not seem to be perceived as a hurdle. Access to information through the existence of credit registries is especially valued by banks operating in developing countries.

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I Introduction

The financing of small and medium-sized enterprise (SME) finance has been of great interest both to policy-makers and researchers because of their significance in private sectors around the world. Data collected by Ayyagari, Beck, and Demirgüç-Kunt (2007) for 76 developed and developing countries indicate that SMEs account for over 60% of manufacturing employment. More importantly, a number of studies using firm-level survey data have shown that SMEs not only perceive access to finance and the cost of credit to be greater obstacles than large firms, but these factors constrain SMEs (i.e., affect their performance) more than large firms. (Schiffer and Weder 2001, IADB 2004, Beck, Demirgüç-Kunt, and Maksimovic 2005, and Beck, Demirgüç-Kunt, Laeven, and Maksimovic 2006). While this research has advanced our understanding of the demand side of SME financing, outside the U.S. and a handful of other countries where case studies have been done, little data exist on the supply side of bank financing to SMEs across countries. This paper tries to fill this void in the literature.

Using newly gathered data for 91 banks from 45 countries, this paper documents the state of financing to SMEs by large banks (the top 5 in each country) around the world. First, we characterize the extent, type, and pricing of this financing and, wherever possible, we compare it to bank financing of large firms. Second, we describe banks' business models and lending practices when it comes to serving SMEs. Finally, we examine the factors driving and impeding bank lending to SMEs across countries. In particular, we analyze the association between bank financing to SMEs and factors related to the contractual, information, legal, and macroeconomic environments as well as to the extent of competition in the segment. Furthermore, we examine the role of government programs and of banking regulations.

Our main findings can be summarized as follows. First, banks both in developed and developing countries see the SME segment as an attractive one, with good prospects, and offer SMEs not only credit, but also other financial services. Hence, we confirm the findings from previous case studies (World Bank, 2007a,b; De la Torre, Martinez Peria and Schmukler, 2008; and Stephanou and Rodriguez, 2008) for a much larger number of countries. Second, though a higher share of bank loans is directed to large firms relative to SMEs, there are surprisingly small differences in the type and pricing of bank loans across firm size. Specifically, we primarily observe differences between developed and developing countries rather than across firm size in the share of lending for investment, in the ratio of secured loans, in fees and interest rates. Third, banks across all countries have set up separate departments to serve SMEs and have decentralized the sale of financial products to the branches, but the loan approval, risk management, and loan recovery functions remain centralized. Fourth, though scoring models are used by most banks in the sample, especially in small business lending, they are only one input in the lending decision process. Fifth, we observe some differences in the lending criteria and collateral used by banks operating in developing vis-à-vis developed countries. In particular, banks in developing countries are more likely to make lending decisions based on a firm's credit history with the bank and the firm owner's characteristics. Furthermore, while real estate is the most important collateral for SME loans around the world, it is less so for banks in developing countries where liquid assets are also commonly used as collateral. Sixth, we also uncover differences across countries in the obstacles to SME financing. In particular, banks in developing countries perceive macroeconomic factors to be the most important obstacle to SME financing, while competition in the SME segment is the main obstacle among banks in developed countries. Finally, across all countries, government programs to promote SME finance are perceived

positively and bank prudential regulations and documentation requirements are not deemed by banks to be a hurdle to SME financing.

This paper is related both to the U.S. literature on bank financing to small businesses as well as to recent case studies on the topic outside the US, a number of which have been conducted by the World Bank. There are two relevant strands in the U.S. literature on bank financing to small businesses. The first strand includes studies that have investigated the propensity of different types of banks to lend to SMEs. In particular, this literature has focused on lending to SMEs by small and large banks and for the most part concludes that small banks are more likely to lend to SMEs (see Berger, Kayshap, and Scalise 1995, Keeton 1995, Berger and Udell 1996, and Strahan and Weston 1996). However, recent studies by Berger and Udell (2006), and Berger, Rosen and Udell (2006) defy this conventional wisdom and discuss evidence to the contrary. Specifically, Berger, Rosen, and Udell (2006) argue that there is not a small-bank bias in lending to SMEs, as indicated by the fact that the probability that a small firm borrows from a large bank is proportional to the market share of large banks. The second strand includes studies that have examined the consequences of bank consolidation on small business lending. Here the evidence is mixed. Studies such as Peek and Rosengren (1996), Berger, Saunders, Scalise, and Udell (1998), Berger, Goldberg, and White (2001) find that mergers reduce small business lending, while Whalen (1995) and Strahan and Weston (1998) provide evidence to the contrary. Goldberg and White (1998) and DeYoung, Goldberg, and White (1999) show that the decline in small business lending due to consolidation can be mitigated by de novo banks that tend to lend more to SMEs than other banks.

Like the studies focused on the U.S., our paper focuses on bank financing to SMEs but the similarities end there. Since our dataset targets the largest 5 banks across countries, we focus only on large bank financing and cannot speak about differences in lending between small and large banks. Also, because we only have data for one year, we are not able to examine the implications of changes in banking sector structure (like bank consolidation) on small business financing. At the same time, our study goes deeper than most of the U.S. studies in examining the business models and lending practices pursued by banks in connection to SMEs. Furthermore, we document banks' perceptions on the drivers and obstacles to financing SMEs. We also explore banks' perceptions on the role of government programs in financing SMEs and on banking regulations. Finally, this paper's biggest appeal is our ability to include information on many important banks operating in a wide range of countries.

This paper is closely linked to and builds on a couple of previous International Finance Corporation (IFC) and World Bank initiatives to better understand banks' involvement with SMEs. The IFC (2007) study was conceived to identify "best practices" in bank involvement with SMEs, including key factors and links among business models, processes, tools, as well as the actual performance in SME banking. As part of this effort, the IFC developed its own questionnaire and in 2006 surveyed 11 banks assumed to be leaders in the SME business segment operating in Australia, Brazil, India, the Netherlands, Poland, Thailand, the UK, and the U.S.

As part of a Latin American Regional study on SME finance, the World Bank (2007a) developed a survey to capture three broad areas of bank business with SMEs: the extent of banks' involvement with SMEs, the determinants of the degree of bank financing to SMEs, and the business model and risk management process that banks use when working with SMEs. The initial study focused on Argentina and Chile and its objective was to cover the most important banks in terms of assets and a wide range of banks in terms of types (e.g., small, large, foreign, domestic, and niche banks). Similar studies using the same questionnaire and with the same objectives were

done for Colombia (Stephanou and Rodriguez 2008) and Serbia (World Bank 2007b). Finally, De la Torre, Martinez Peria, and Schmukler (2008) combine the data from the IFC and World Bank case studies, along with data from SME surveys in Latin America, to show that the conventional wisdom that relationship lending by small and niche banks is at the heart of SME finance is misguided, at least in the countries they consider in their sample.

Though the questionnaire developed as part of this paper has elements of the surveys used by the IFC (2007) and World Bank (2007a) studies, there are a couple of important differences between our paper and these other studies. First, the objectives of all three studies are different. While the IFC study is interested in benchmarking best practices in SME finance around the world and the World Bank study is focused on examining in depth the banking sector's involvement with SMEs in individual countries, this study's objective is to document the state of large bank financing to SMEs around the world. Hence, we cover a lot more countries than both other studies. In particular, we try to compare findings for developed and developing countries. However, in striving to cover more countries, we can only focus on the largest banks. Also, our questionnaire and this study places a lot more emphasis on obtaining and analyzing quantitative data on the extent, type, and pricing of bank financing to SMEs than the other two studies. Finally, wherever possible, this study tries to compare SME financing to large firm financing which the other studies do not.

The rest of the paper is organized as follows. Section II describes the survey we use to gather our data. Section III presents our findings regarding the extent, type, and pricing of banks financing to SMEs across countries. Section IV documents what we find regarding banks' business models and lending practices when it comes to serving SMEs. Section V presents the

evidence on banks' perceptions regarding the determinants of SME financing and the role that government programs and regulations play and Section VI concludes.

II The Survey

To gather information on bank financing to SMEs around the world, we designed a survey with 56 questions focusing on three main areas. The first part includes questions to gauge the extent, type, and pricing of bank financing to SMEs. To measure the extent of banks' involvement with SMEs, we gathered data on the share of lending to SMEs vis-à-vis total loans. To characterize the type of financing, we collected information on the share of loans devoted to investment purposes and the ratio of loans that are collateralized or secured. We describe the pricing of SME loans by gathering data on the fees and interest rates charged on these loans. For many of these questions, we also asked for the corresponding values for large firms in order to compare SME to large firm bank financing.

Second, the survey includes questions related to the business models, lending practices and risk management setups used by banks to serve SMEs. In particular, we asked whether banks have separate specialized departments to manage their business with SMEs, whether sales decisions are separated from risk management, whether SME loans are processed at the branches or at headquarters, whether credit scoring is used to approve SME loans, what types of criteria are most important when evaluating SME loans (i.e., relative importance of financial assessment of the business, firm credit history, firm owner characteristics, collateral, size of the loan, purpose of the loan, etc.) and what type of collateral is most frequently used in SME lending.

Finally, we included questions to determine the factors that banks consider important drivers and obstacles in their involvement with SMEs. In particular, we asked banks to rank the

importance of factors related to the macroeconomic, regulatory, legal, and institutional frameworks, as well as the significance of factors such as the demand for financing, the degree of competition in the banking sector (and in different business segments), the level of taxes in the economy, bank organizational issues, and SME specific factors (such as opacity, informality, size, etc.). Within this section of the survey, we also included questions on the role and importance of government programs and of regulations to facilitate financing to SMEs.

The survey targets the 5 largest banks in each country. We focus on the largest banks because these are the ones with the most extensive branch networks and, hence, the ones most accessible to SMEs, at least in terms of location. Also, these are the banks with the largest lending capabilities.

Table 1 shows the number of banks and countries that responded to our survey along with the banks' market share. To date, we have obtained responses from 91 banks in 45 countries. We obtained multiple bank responses for 30 countries: for 4 countries we got 4 banks to respond in each country, for 8 countries we received responses from 3 banks, and for 18 countries we obtained 2 bank responses. Only one bank responded in 15 countries.

Among the 45 countries in our sample, 38 are developing and the remaining 7 are developed. Our dataset covers 14 countries in Eastern Europe and Central Asia, 9 in Latin America and the Caribbean, 8 in Sub-Saharan Africa, 4 in South Asia, 2 in the Middle East and North Africa and 1 in East Asia. All 7 developed countries are in Western Europe.

On average, the banks that responded account for 32 percent of banking system loans. The loan market share exceeded 30 percent for 24 countries. For 25 countries, we were able to get a response from the largest bank in the system.

Our questionnaire includes quantitative and qualitative questions. To insure representativeness and in order not to reveal banks' identity, we report quantitative data at the country-level only for those countries where more than one bank responded and the market share of respondents exceeds 30 percent. We also show country-level figures for those countries where the market shares might be below 30 percent, but the largest bank in the country was among respondents. When we report quantitative country-level data, we show weighted averages where we weigh each individual bank data by the share of loans held by each bank among banks that responded in that country. Along with the individual country-level data, we report an unweighted average for all banks operating in developing countries and, separately, in developed countries.

Information on the qualitative questions is conveyed by reporting the percentage of banks that chose each option provided under each question. Because the number of banks covered in each country in our survey is small, we do not show individual country-level responses. Instead, we report the percentage of banks that chose each response, separating among banks operating in developed and developing countries.

III The state of bank financing to SMEs

The vast majority of banks in our survey report having SME clients. Critically, most banks offer deposit, payment, and credit services to SMEs, showing that they approach SME banking broadly rather than narrowly focusing on lending only. Specifically, 100 percent of banks in developed and 94 percent of banks in developing countries state that they offer loans, deposit, and payment services to SMEs. Among the 80 banks from developing countries, 3 banks state they provide loans and deposits services, 1 bank reports offering only deposit and payment services, and only 1 bank indicates not having any SME clients.

Most banks define SMEs in terms of sales. Approximately 85 percent of banks operating in developing countries and 71 percent of those in developed countries use sales to define SMEs. The remaining banks define SMEs in terms of assets or employees. On average, banks in developing countries define small businesses as those with sales up to 4 million dollars and medium-sized enterprises as those with sales up to 14.5 million dollars. Among banks in developed countries, on average, SMEs have up to 5.5 million dollars in sales and medium-sized enterprises' sales average up to 28 million dollars.

Loan exposures to SMEs and to large firms are similar across banks operating in developed and developing countries, with close to 20 percent of loans devoted to SMEs and approximately 30 percent going to large firms (see Figure 1). Table 2b reveals that there are no statistically significant differences between loan exposures of banks operating in developing and developed countries. On the other hand, at least for banks operating in developing countries we observe statistically significant differences between exposures by firm size (see Table 2a). Specifically, across all developing country banks, the share of lending to SMEs averages 23 percent of total lending (in terms of amounts), while lending to large enterprises accounts for 33 percent of total lending. For banks operating in developed countries, SME bank financing averages 18 percent and large firm financing accounts for 28 percent of total lending. Unlike the case of banks operating in developing countries, this difference is not statistically significant, perhaps because the number of observations for developed countries is quite small. Lending to SMEs is highest in Georgia, where 61 percent of loans seem to be SME loans, and lowest in Uruguay, where only 1 percent of loans are directed to SMEs.

Loan approval rates are similar for SMEs and large enterprises (Figure 2). Both among developing and developed countries, we only find very small and statistically insignificant

¹ The remaining loans are to households, financial institutions, and governments.

differences between the percentage of SME loans approved and those approved for large firms (Table 2a). In particular, among banks operating in developing countries the share of loan applications approved for SME lending is 78 percent and it is 81 percent for large firms. Across countries, only for India and Mexico do we observe significant differences in the share of applications approved for SMEs and large firms. In India, 55 percent of SME applications received are approved relative to 81 percent for large firms. In Mexico, these same numbers are 76 percent and 99 percent, respectively. The percentage of SME loan applications approved is highest in Bulgaria at 97 percent and lowest in Slovenia with 16 percent. For banks in developed countries, the share of SME loan applications approved is 83 percent and it is only 4 percentage points higher (87 percent) for large firm loans. Table 2b shows that there are no significant differences within firm size classes across banks operating in developing and developed countries. In other words, we find no statistically significant differences in the share of applications approved for SMEs and, separately, large firms by banks operating in developed and developing countries.

While we observe considerable differences in the percentage of investment loans directed to SMEs among banks operating in developed vis-à-vis developing countries (see Table 2b), within each group of countries we do not observe significant differences in the shares of investment loans for SMEs and those for large firms (see Figure 3 and Table 2a). For banks operating in developing countries, the average share of investment lending directed to SMEs (i.e., how much of the SME lending is devoted to financing long-term investments) is 46 percent, while it is close to 50 percent for large firms. As expected, investment lending is more common in developed countries (perhaps due to a more efficient contractual framework and greater access to information), where 68 percent of SME loans are for investment purposes and 73 percent of

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² Lebanon seems to be the only exception.

large loans are also dedicated to financing investments. Across all countries, the share of SME lending for investment purposes is highest among the largest banks in Switzerland (93%) and lowest in Greece (18%).

The share of secured lending both to SMEs and large firms is generally lower (and statistically different) among banks in developed countries vis-à-vis those in developing countries (see Table 2b), while there is no significant difference across borrowers of different sizes within each group of countries (see Figure 4 and Table 2a). The mean share of secured SME loans among banks in developed countries is 49 percent, while it is 81 percent for banks in developing countries. Similarly, for large firm financing the mean share of secured lending by developed country banks is 43 percent, while it is 75 percent among banks in developing countries. The larger share of secured lending by banks operating in developing countries might reflect the weaker informational and contractual environment in these countries. Across countries, the share of SME lending that is secured is highest in Costa Rica (100%) and lowest in Malta (28%).

Figure 5 shows that fees charged on SME loans are generally lower for banks operating in developed relative to developing countries. On average, the fees charged for SME loans by developed country banks are 0.37 percent of these loans, while fees charged for SME loans by developing country banks average 0.96 percent. This might reflect the higher fixed transaction costs, typically smaller loan sizes, and less competitive banking sectors in developing countries. Fees on large firm lending are lower than those on SME loans. Among developing country banks fees average 0.83 percent and they average 0.22 percent among banks operating in developed countries. Differences between the average fees for banks in developed and developing countries (both for SMEs and large firms loans) are large and statistically significant

(see Table 2b). On the other hand, the difference between fees on large and SME loans seem surprisingly small, in particular, given the frequently stated argument that SME loans are based on soft information that is very costly to gather for the bank. In fact, there is no statistical difference between the means for fees on SMEs and large firms (see Table 2a). Across countries, fees are highest in Kenya (2.8%) and lowest in Colombia (almost 0%).

As expected given differences in macroeconomic fundamentals (in particular, greater growth and exchange rate stability and lower inflation) interest rates charged by banks operating in developed countries are lower than those in developing countries (see Table 2b). On the other hand, surprisingly, there is no significant difference in interest rates for the large and SME borrowers within each country group (Figure 6 and Table 2a). The average interest charged to a bank's best clients on SME loans among banks operating in developed countries is 4.7 percent, while the mean for banks operating in developing countries is 11.2 percent. For banks in developed countries the interest rate on the best large firm clients averages 4 percent, less than 1 percentage point below that charged on SME loans. For banks in developing countries, the difference between SME and large loan interest rates is one percentage point. Banks operating in developing countries, on average charge 10.2 percent on large firm loans.

Figure 7 shows that interest rates charged on the highest risk (worst) clients are significantly higher than the ones charged on the best clients, but the pattern described in terms of differences between developed and developing countries and lack of differences between SMEs and large firms continue to hold. The average interest rate on SME loans made by banks operating in developed countries is 8.8 percent, while it is 15.7 percent for banks operating in developing countries. As shown in Table 2b, these differences are statistically significant. On the other hand, we find no significant difference between the rates charged on large firm loans and

those charged on SME loans (see Table 2a). Among, developed country banks, the interest rates charged on large firm loans averages 7.3 percent. The average interest rate on large firm loans among developing country banks is 14 percent.

While SME loans perform worse than large enterprise loans across most countries, the differences are not very large and they are only marginally statistically significant (i.e., significant at 10 percent) across banks in developing countries (see Figure 8 and Table 2a). For these banks, the average share of non-performing loans to total loans for SMEs is 6.5 percent while it is 4.1 percent for large firm loans. Among banks operating in developed countries, the average share of non-performing loans is for 6.93 for SME loans and 2.54 for large firm loans. Differences between non-performing loan shares for banks in developed and developing countries are not statistically significant (see Table 2b). The share of SME loans that is non-performing is lowest in Turkey (close to 0%) and highest in Malta (close to 17%).

Summarizing, banks in developing and developed countries are active in providing financial services to SMEs. While there are differences in banks' exposure to SMEs vis-à-vis large firms, there are small and statistically insignificant differences in approval rates, share of investment loans, ratios of secured lending, fees, and interest rates between loans to large enterprises and SMEs. Instead, we observe significant differences between banks operating in developed and developing countries.

IV Banks' business models and lending practices in serving SMEs

In this section, we examine the business models and lending practices banks follow to serve SMEs. How do banks structure their operations to serve SMEs? What degree of decentralization do they allow for? How do banks make lending decisions? What criteria do

banks use to make loans? What types of collateral are most commonly used? Wherever it is possible, we compare our findings for small versus medium-sized businesses and we contrast them to what banks report about their approach to large firm financing.

Most banks have set up separate departments to manage their relations with SMEs (Figure 9). Sixty percent of developed country banks have an SME department, separate from the division that deals with large businesses. Sixty-eight percent of developing country banks indicate having a similar set up. Thirty percent of banks from developed countries say they have separate departments for small businesses and for medium-sized enterprises. This set up is less common among developing countries, where only 9 percent of banks report having a department for small businesses and one for medium-sized enterprises. In developing countries, 12 percent of banks have only a small business department and seem to lump medium-sized enterprises with large enterprises and only 9 percent of banks do not have any special department to handle their involvement with SMEs.

The majority of banks operating both in developed and developing countries have decentralized the selling of non-lending products to small and medium-sized enterprises (Figure 10 and 11). Roughly 61 percent of banks in developing countries and 70 percent of banks operating in developed countries respond that the sales of non-lending products to small businesses is done only or primarily at branches (Figure 10). Decentralization is somewhat less prevalent when it comes to medium-sized lending. Sixty percent of developed country banks and 51 percent of developing country banks select the same option for medium-sized enterprises (Figure 11).

In contrast to sales, banks' loan approval, risk management and non-performing loan recovery functions tend to be more centralized, especially when it comes to medium-sized

enterprises and, in particular, among developing country banks. While close to 45 (36) percent of developed country banks say that loan approval for small (medium-sized) loans is done only or primarily at branches, only 19 (14) percent of banks operating in developing countries report this option for small(medium-sized) lending. Similarly, 40 (22) percent of developed country banks respond that risk management for small business (medium-sized) lending is done only or primarily at branches, while solely 8 (4) percent of developing country banks select this option for small business (medium-sized) lending. Finally, both for developing and developed country banks, non-performing loan recovery actions are mostly centralized. Only 20 percent of developed country banks indicate that loan recovery for small and medium-sized loans is done only or primarily at branches. Among developing country banks, only 13 (8) percent say that small (medium-sized) business loan recovery is done primarily at branches.

Banks operating in developed and developing countries perceive that the demand for their services from small and medium-sized firms is strong, but they indicate that they still have to do a fair amount of reaching out to clients. Close to 90 percent of developing country banks and 80 percent of developed country banks select this option when asked about how much reaching out banks are doing to clients.

While banks operating in developed countries seem to rely to a large extent on existing databases (like credit registries) to go after potential SME clients, banks operating in developing countries reach out to clients in many different ways (Figure 12). Almost 45 percent of developed country banks say they use information from existing data sources. In contrast, only 16 percent of developing country banks say they rely on these databases, perhaps because they are less frequently available in these countries. Banks in developing countries, on the other hand, seem to focus on attracting SMEs that are clients/suppliers of existing clients or rely on existing

deposit clients. Almost 27 percent select the first option and 25 percent select the second one, respectively.

Banks from developed and developing countries are using scoring models for their lending decisions to small firms, but less so for medium-sized enterprises (Figure 13). Only 18 percent of developed country banks say they do not use scoring for small business lending, while almost 45 percent report not using scoring for medium-sized enterprise lending. Among developing countries banks, as expected given that they tend to be less sophisticated, a higher percentage is not using scoring. Almost 49 percent of banks are not using scoring for medium-sized enterprises and 35 percent report not using scoring for small business lending.

But scoring is used primarily as <u>one</u> input in the lending decision process. Among banks in developing countries, only 10(7) percent of banks report approving small(medium-sized) business loans purely based on scoring as opposed to 54(44) percent that report using scoring as an input for small(medium-sized) business lending. Among banks in developed countries, 82 percent say that scoring is only an input into loan decisions for small businesses and 55 percent give the same response in connection to loans to medium-sized enterprises.

When scoring is not used as the main loan approval mechanism, the majority of banks in developing countries report that lending decisions for both small and medium-sized enterprises are made by the credit risk and sales department in conjunction (Figure 14). For small business loans almost 83 percent of banks indicate this option. This percentage climbs to 85 percent for lending to medium-sized enterprises. When it comes to small business lending among developed country banks, 60 percent of them state that the sales department has the capacity to approve loans independently. On the other hand, for medium-sized loans 83 percent of banks report that lending decisions are made by the sales and credit departments in conjunction.

While the financial assessment is the most important loan approval criterion across countries, a firm's credit history and owner characteristics are important in developing countries, while loan size is the second-most important criterion in developed economies. We examine separately the criteria used for small and medium-sized business lending and compare this to banks' responses regarding lending to large firms. In particular, Figures 15, 16 and 17 report the percentage of banks that rank each option presented as the most important for small, mediumsized, and large business lending, respectively. We examine the role of collateral, the financial assessment of the business, a firm's credit history with the bank, a firm's credit history from a credit registry, the firm's owner characteristics, and the size and purpose of the loan. For small business lending, 50 percent of developed country banks and 49 percent of developing country banks indicate that the financial assessment of the business is the most important criteria (Figure 15). Among developed country banks, the size of the loan receives the second most votes as the key factor driving small business lending (20 percent of banks select this option). The purpose of the loan, the collateral and a firm's credit history from a registry are all mentioned next, with 10 percent of banks selecting each of these options. Among developing country banks, a firm's credit history with the bank is the second most selected criteria followed by firms' owner characteristics and collateral. Almost 16 percent of developing country banks indicate that a firm's credit history with the bank is the most important criteria, while 9 percent of developing country banks pick firm's owner characteristics. Approximately, 8 percent reports collateral as the most important criteria.

While we observe a similar pattern for medium-sized as for small business financing (Figure 16), the financial assessment of the firm is more important for medium-sized business financing than for small business lending and collateral is relatively less important. Sixty-three

percent of developed country banks and 59 percent of developing country banks report the financial assessment of the business as the most important criteria. Similarly to what we found for small business lending, among developed country banks the size of the loan is second in importance, with 18 percent of developed country banks reporting this option. Among developing country banks, the credit history of the firm and the owner characteristic rank second and third as the most important criteria banks consider when approving a loan. On the other hand, collateral is only mentioned as the most important factor among 4 percent of developing country banks.

Surprisingly, we do not find many differences in terms of the criteria for making loans to large businesses relative to what we find for small and medium-sized enterprises (Figure 17). Perhaps the most notable difference is that a higher percentage of banks report the financial assessment of the business as the most important criteria considered in lending to large firms. In particular, 70 percent of developed country banks and 63 percent of banks from developing countries indicate this option. Among developed country banks, the size of the loan, purpose of the loan, and firm credit history are tied in the rankings, with 10 percent of banks choosing each of these factors as the most important. Among developing country banks, firm's credit history with the bank continues to be the second most reported option, with 13 percent of banks choosing this response.

While not a decisive approval criterion, at least three quarters of banks require collateral to make business loans (Figure 18). Once again, we do not see significant differences in terms of small, medium-sized and large firm financing. Among developed countries, 78 percent of banks require collateral for small business financing, almost 88 percent require it for medium-sized business lending and 75 percent require it for large firm financing. As expected given that the

informational and institutional environment is weaker in developing countries, a higher percentage of banks require collateral to make business loans in these countries. Almost 87 percent of banks required collateral for small business lending, 93 percent require it for medium-sized enterprise financing and 94 percent ask for collateral for loans made to large firms.

Real estate is the most frequently used type of collateral for small business lending, but less so in developing countries (Figure 19). Almost 56 percent of banks in developed countries indicate that real estate is the most commonly used type of collateral for small business lending. In contrast, 37 percent of developing country banks report real estate as the most important collateral type. Among these banks, cash and other liquid assets rank second in terms of importance as collateral types, with 23 percent of banks indicating this option. Bank and personal guarantees and cash and other liquid assets are equally important for banks in developed countries, with 22 percent of banks reporting each of these options.

Real estate is even more important as collateral for lending to medium-sized businesses. Relative to small business lending, a higher percentage of banks report real estate as the most important collateral type for medium-sized business lending, especially among developed country banks (Figure 20). Eighty percent of them indicate real estate as the most important type of collateral, while 10 percent select cash and other liquid assets and 10 percent choose bank and personal guarantees. On the other hand, 40 percent of developing country banks select real estate as the most important collateral type for medium-sized lending and 23 percent indicate that cash and other liquid assets are important.

For large enterprise lending, real estate appears to be less commonly used as collateral by developed country banks, while the proportion of developing country banks using real estate as collateral for large firm financing is very similar to that found for medium-sized and small

business lending (Figure 21). Approximately 63 percent of developed country banks and 39 percent of developing country banks use real estate as collateral for large firm financing. Bank and personal guarantees are the second most commonly used collateral type among developed country banks, while banks operating in developing countries tend to rely more on cash and liquid assets. Among developed country banks, twenty five percent select bank and personal guarantees, while only 14 percent of banks operating in developing countries indicate using this collateral type. On the other hand, 21 percent of banks in developing countries use cash and other liquid assets as collateral for large firm financing, while only 13 percent of developed country banks select this option.

Summarizing, banks across all countries have set up separate departments to serve SMEs, have decentralized the sale of financial products to the branches, but continue to centralize the loan approval, risk management, and loan recovery functions. Though scoring models are used by most banks in the sample, especially in small business lending, they are only one input in the loan decision process. Finally, we observe some differences in the lending criteria and collateral used by banks operating developed vis-à-vis developing countries. In particular, banks in developing countries are relatively more likely to engage in relationship lending, making lending decisions based on a firm's credit history with the bank and the firm owner characteristics. Furthermore, while real estate is the most important collateral for SME loans around the world, it is less so in developing countries where liquid assets are also commonly used as collateral.

V What factors affect bank financing to SMEs?

Our survey includes a number of questions related to the determinants of banks' involvement with SMEs. In particular, we ask banks about the drivers and obstacles to their

involvement, about the size of the market and future prospects, and about the role of government programs and of regulations in shaping their exposure to SMEs.

Figure 22 reveals that the most important driver for banks' involvement with SMEs is the perceived profitability of this segment. Eighty-one percent of banks from developed countries and 72 percent of banks from developing countries indicate that this is the most important determinant for their involvement. In the case of banks from developing countries, 9 percent of respondents mention competition in the large business segment as being the most important driver. Competition for retail customers seems to be more important among developed country banks. Nine percent of these banks select this as the most important driver. Finally, 9 percent of developed country banks and 5 percent of developing country banks indicate that the most important driver for their involvement with SMEs is the possibility to seek out these clients through their existing relations with large clients.

The fact that most banks find the SME market desirable is also confirmed in Figure 23. The figure shows banks' responses to how they perceive the SME market. Eighty-two percent of banks from developed countries and 83 percent from developing countries respond that they believe the SME market is big (in terms of the number of potential clients) and that prospects are good. The SME market is perceived to be small but prospects to be good by 14 percent of developing country banks. Only 3 percent of banks from developing countries respond that they think the prospects for the SME segment are bleak, while 18 percent of developed country banks respond in this way.

While most banks seem to agree on the factors driving their involvement with SMEs and perceive prospects in this segment to be very good, there is more widespread disagreement regarding the obstacles to banks' growth in this line of business (Figure 24). Among banks in

developed countries, the top obstacle seems to be competition in the SME segment. Forty-five percent give the highest rating to this obstacle. Lack of adequate demand bank also seems to be a consideration. Eighteen percent of developed country banks rank this as the main obstacle. On the other hand, among developing country bank, the top rated obstacle is the state of the macroeconomy. Thirty-nine percent of banks indicate this as the top reason impeding their growth in the SME segment.³ Regulations and competition in the SME segment also seem to be important. Seventeen percent of respondents indicate regulation and 15 percent mark competition in the SME segment as the top obstacles. Surprisingly, only 8 percent of developing country banks rate the legal and contractual environment as the top obstacle. This suggests that banks adapt to the legal and contractual environment in which they operate perhaps by offering instruments that allow them to circumvent existing deficiencies (See de la Torre, Martinez Peria and Schmukler 2008). Similarly, only 6 percent of banks in developing countries cite SME-specific factors (like opacity or informality) as an obstacle.

Banks report that government programs to promote SME finance exist in 6 out of the 7 developed economies and 32 out of the 45 developing countries in our sample. Consistent with recent evidence (Beck, Klapper, Mendoza, 2008; Honohan, 2008), guarantee schemes are the most common government program used to support SME financing among developed countries and developing countries. According to the surveyed banks, such schemes are in operation in 6 developed countries and 28 developing countries. Directed credit programs are the second most popular among developing countries. They are in place in 24 developing countries. Among developed countries, interest rate subsidies are the second most common, they exist in 5 of the 7 countries in our sample. Interest rate subsidies are also prevalent among developing countries, 23

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³ We also ask banks to list the macroeconomics factors that were most problematic. Most banks mention macro instability, high interest rates and exchange rate risk.

economies have them in place. Regulatory subsidies are less common. Only 16 developing countries and only 3 developed countries have these.

In general, banks have a positive perception of government programs to support SMEs (Figure 25). In developing countries more than 70 percent of banks rate the impact of interest subsidies, guarantee programs, and even directed credit program as positive. Regulatory subsidies are less popular with only 47 of banks rating them as having a positive influence. But, these programs are less common and in most cases they are rated as inconsequential. Among, developed countries more than 50 percent of banks rate government programs as having a positive effect on their involvement with SMEs.

Not surprisingly given how ubiquitous guarantee program are, banks from developed and developing countries rate them as the most important government program influencing SME financing (Figure 26). Specifically, 50 percent of developed country banks and 56 percent of banks from developing countries rate guarantees as the most influential government program. Among banks in developed countries, directed credit programs are the second most popular with 40 percent of banks ranking them as the most influential. On the other hand, developing country banks perceive interest rate subsidies and directed credit programs as equally influential since in 21 percent of banks are ranking each of these programs as the most important.

It is important to be careful in interpreting banks' responses regarding the impact of government programs. Banks might have a positive view of these programs and perceive them as influential even if they are not successful in terms of their public policy objectives. For example, banks can rate the effect of these programs as positive because they allow them to offer cheap or longer term financing to their existing clients allowing them to solidify their banking relationships, but yet the programs might be failing the goal of extending bank financing to

previously unserved SMEs. Hence, while it is interesting to know banks' perception of government programs, an evaluation of their true impact requires much more careful analysis and data.

Aside from the role of specific programs to promote SME financing, governments can influence banks' involvement with SMEs through the regulations that they put in place. Figure 27 examines the role of regulations concerning documentation requirements for lending to SMEs, while Figure 28 shows banks' impression of how prudential regulations affect their involvement with SMEs. Sixty-four percent of developed country banks and 68 percent of developing country banks indicate that they perceive documentation requirements for lending to SMEs to be "appropriate and beneficial" compared to 20 percent of developing country banks and 9 percent of developed country banks that consider them "excessive". Similarly, most banks consider prudential regulations to have a positive or inconsequential effect on SME financing. Fifty-four percent of developing country banks indicate that prudential regulations have a positive impact and 24 percent of these banks rate them inconsequential. Among developed country banks, almost 36 percent rate them positively and 46 percent of banks consider them inconsequential. This is an interesting finding, given that recent country studies (Adasme, Majnoni and Uribe, 2006) have found that capital requirements can have a bias against SME lending, as SME loans are more risky overall but have less tail risk than large enterprise loans.

Access to credit history information appears to be particularly important for banks in developing countries (Figure 29). More than two thirds of developing country banks respond that the existence of a credit bureau in their country facilitates SME lending. On the other hand, only 44 percent of banks from developed countries rate the existence of a credit bureau as beneficial for SME lending. These differences might reflect the fact that SME opaqueness (e.g., lack of

verifiable financial statements for the firm) and perhaps informality are greater issues for banks operating in developing countries. This finding is also consistent with aggregate results from Djankov, McLiesh and Shleifer (2007) who find that the quality of credit information sharing is more important for financial deepening in developing than in developed countries.

In summary, banks are attracted to the SME segment due to its perceived high profitability and good prospects. While banks in developed countries see competition as a major obstacle, banks in developing countries point mainly to macroeconomic conditions. Banks' reaction to government support programs is positive overall and prudential regulations do not seem to be perceived as a hurdle. Access to information through the existence of credit registries is especially valued by banks operating in developing countries.

VI Conclusions

This paper surveyed banks around the world to document the state of SME financing across countries and to compare it to large firm financing, wherever possible. We find that across countries, banks perceive serving SMEs as a profitable endeavour and almost all banks have SME clients. Though we find differences in exposure, lending practices, business models, drivers and obstacles of SME finance for banks operating in developed vis-à-vis developing countries, we uncover surprisingly small differences when we compare banking to SMEs relative to large firms.

While a large literature has used firm-level data to analyze differences in access to finance by firm size, this paper is a first step in better understanding SMEs financing from the supply side. Going forward, it would be interesting to expand the number of banks and countries surveyed in order to see if we can corroborate our findings in a larger sample. Also, it would be

useful to explore in greater depth what drives the differences we have found across developed and developing countries.

References (to be completed)

- Adasme, O., Majnoni, G., and Uribe, M., 2006. Access and Risk: Friends or Foes?:

 Lessons from Chile. World Bank Policy Research Working Paper 4003.
- Ayyagari, M., Beck, T., and Demirgüç-Kunt, A., 2007. Small and Medium Enterprises across the Globe. *Small Business Economics* 29, 415-434.
- Beck, T. and Demirgüç-Kunt, A., 2006. Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint. *Journal of Banking and Finance* 30, 2931–2943.
- Beck, T., Demirgüç-Kunt, A., Laeven, L., and Maksimovic, V., 2006. The Determinants of Financing Obstacles. *Journal of International Money and Finance* 25, 932-952.
- Beck, T., Demirgüç-Kunt, A., and Maksimovic, V., 2005. Financial and Legal Constraints to Firm Growth: Does Firm Size Matter? *Journal of Finance* 60, 137-177.
- Beck, T., Demirgüç-Kunt, A., and Maksimovic, V., 2008. Financing Patterns around the World: Are Small Firms Different? *Journal of Financial Economics*. Forthcoming.
- Berger, A.N., Goldberg, L.G., White, L.J., 2001. The Effects of Dynamic Changes in Bank Competition on the Supply of Small Business Credit. *European Finance Review* 5, 115-139.
- Beck, T., Klapper, L., and Mendoza, J.C., 2008. The Typology of Partial Credit Guarantee Funds around the World. World Bank. Mimeo.
- Berger, A. N., Kayshap, A. K., and Scalise, J. M., 1995. The Transformation of the U.S. Banking Industry: What a Long Strange Trip It's Been. *Brookings Papers on Economic Activity* 2, 155-219.

- Berger, A. N., Miller, N. H., Petersen, M. A., Rajan, R. G., and Stein, J. C., 2005. Does Function Follow Organizational Form? Evidence from the Lending Practices of Large and Small Banks. *Journal of Financial Economics* 76, 237-269.
- Berger, A. N., Rosen, R. J., and Udell G. F., 2006. Does Market Size Structure Affect Competition? The Case of Small Business Lending. *Journal of Banking and Finance*, forthcoming.
- Berger, A.N., Saunders, A., Scalise, J.M., and Udell, G.F., 1998. The Effects of Bank Mergers and Acquisitions on Small Business Lending. *Journal of Financial Economics* 50, 187-220.
- Berger, A. N. and Udell, G. F., 1996. Universal Banking and the Future of Small Business Lending. In: Saunders, A., Walter I., (Eds.), *Financial System Design:*The Case for Universal Banking. Irwin (Richard D), Burr Ridge, IL, 559-627.
- Berger, A. N. and Udell, G. F., 2006. A More Complete Conceptual Framework for SME Finance. *Journal of Banking and Finance* 30, 2945-2966.
- Cole, R. A., Goldberg, L. G., and White, L. J., 2004. Cookie-Cutter versus Character:

 The Micro Structure of Small Business Lending by Large and Small Banks. *Journal of Financial and Quantitative Analysis* 39, 227-251.
- De la Torre, A., Martinez Peria, M.S. and Schmukler, S., 2008. Bank Involvement with SMEs: Beyond Relationship Lending. World Bank. Mimeo.
- DeYoung, Goldberg and White, 1999.
- Djankov, S., McLiesh, C., and Shleifer, A., 2007. Private Credit in 129 Countries. *Journal of Financial Economics* 84, 299-329.
- Goldberg. L.G., and White, 1998.

- Hallberg, K., 2001. A Market-Oriented Strategy for Small and Medium-Scale Enterprises. International Finance Corporation Discussion Paper 40.
- Haynes, G. W., Ou, C. and Berney, R., 1999. Small Business Borrowing from Large and Small Banks. In: Williams, J.L., Rhine, A. S.L.W. (Eds.), Business Access to Capital and Credit, Blanton, A Federal Reserve System Research Conference, 287-327.
- Honohan, P., 2008. Partial Credit Guarantees: Principles and Practice. Trinity College.

 Mimeo.
- IADB, 2004. Unlocking Credit: The Quest for Deep and Stable Lending. The Johns Hopkins University Press.
- IFC, 2007. Benchmarking SME Banking Practices in OECD and Emerging Markets.
- Keeton, W., 1995. Multi-Office Bank Lending to Small Businesses: Some New Evidence. Federal Reserve Bank of Kansas City *Economic Review* 80, 45-57.
- Schiffer, M. and Weder, B., 2001. Firm Size and the Business Environment: Worldwide Survey Results. International Finance Corporation Discussion Paper 43.
- Stephanou, C. and Rodriguez, C., 2008. Bank Financing to Small- and Medium-Sized Enterprises (SMEs) in Colombia. World Bank Policy Research Working Paper 4481.
- Strahan, P. E. and Weston, J., 1996. Small Business Lending and Bank Consolidation: Is

 There Cause for Concern? *Current Issues in Economics and Finance*, Federal

 Reserve Bank of New York, 2:1-6.
- Strahan, P.E. and Weston, J. 1998.

Whalen, 1995.

- World Bank, 2007a. Bank Financing to Small and Medium Enterprises: Survey Results from Argentina and Chile. Mimeo.
- World Bank, 2007b. Bank Lending to Small and Medium Enterprises: The Republic of Serbia. Mimeo.

Table 1

Survey respondents: countries, banks, and market share
Table shows the countries in our sample, the number of banks that responded from each country (including whether the largest bank has participated in the survey) and the market share of respondents relative to total loans.

Country	No. of Banks	Has largest bank responded?	Market share covered (% of loans to total system loans)		
Albania	3	Yes	59%		
Armenia	3	Yes	35%		
Austria	1		1%		
Belarus	1	Yes	48%		
Belgium	1		10%		
Bosnia	2	Yes	38%		
Brazil	1		9%		
Bulgaria	2	Yes	32%		
Chile	1		19%		
Colombia	3	Yes	48%		
Costa Rica	2	Yes	31%		
Croatia	2		22%		
Ecuador	1	Yes	38%		
El Salvador	1	100	26%		
Ethiopia	1		16%		
Finland	1	Yes	38%		
Georgia	3	103	47%		
Greece	2	Yes	33%		
Honduras	2	103	29%		
Hungary	2	Yes	35%		
India	4	Yes	41%		
Indonesia	2	100	20%		
Jordan	1		6%		
Kenya	2	Yes	27%		
Lebanon	3	Yes	37%		
Lithuania	3	105	48%		
Malawi	2	Yes	65%		
Malta	3	Yes	71%		
Mexico	2	Yes	23%		
Moldova	2	103	35%		
Nepal	1		8%		
Pakistan	1	Vas	14%		
	1	Yes	8%		
Poland Sierra Leone	2		21%		
	2	Yes	40%		
Slovakia	4	Yes	61%		
Slovenia	2	Yes	11%		
South Africa	4	Yes	69%		
Sri Lanka		Tes	35%		
Swaziland	1				
Sweden	1	V	27%		
Switzerland	2	Yes	40%		
Turkey	3	Yes	24%		
Uruguay	2	Yes	46%		
Zambia	2		28%		
Zimbabwe	4		25%		

Table 2.a
Test of differences in means between SMEs and large firms

Variable	Income group	Mean for SME	Mean for large	t-test	p-value
		loans	firms loans		_
Share of total loans	Developed	17.93%	27.88%	1.18	0.26
Share of total loans	Developing	22.99%	32.80%	2.33	0.02**
Change of annihilations annual	Developed	82.75%	86.94%	0.29	0.80
Share of applications approved	Developing	78.11%	80.76%	0.52	0.61
Charactions for investment	Developed	68.04%	72.93%	0.35	0.74
Share of loans for investment	Developing	46.18%	49.82%	0.74	0.46
Share of secured loans	Developed	49.27%	42.80%	-0.45	0.67
Share of secured loans	Developing	81.48%	74.85%	-1.36	0.18
I can face	Developed	0.37%	0.22%	-0.68	0.51
Loan fees	Developing	0.96%	0.83%	-0.73	0.47
Interest nates on best allegts	Developed	4.66%	4.00%	-0.59	0.57
Interest rates on best clients	Developing	11.16%	10.22%	-0.74	0.46
Interest nates an arrest allerts	Developed	8.79%	7.30%	-0.86	0.41
Interest rates on worst clients	Developing	15.65%	14.09%	-0.98	0.33
Chara of non monforming loons	Developed	6.93%	2.54%	-1.46	0.19
Share of non-performing loans	Developing	6.49%	4.13%	-1.68	0.10*

^{*, ***, ***} indicate significance at the 10, 5, and 1 percent levels, respectively

Table 2.b
Test of differences in means between developed and developing countries

Variable	Firm Type	Mean for	Mean for	t-test	p-value
	• •	Developing	Developed		•
		Countries	Countries		
Chara of total loops	SMEs	22.99%	17.93%	-1.03	0.32
Share of total loans	Large firms	32.80%	27.88%	-0.61	0.55
Chara of applications approved	SMEs	78.11%	82.75%	0.57	0.59
Share of applications approved	Large firms	80.76%	86.94%	0.47	0.71
Share of loans for investment	SMEs	46.18%	68.04%	1.58	0.18
Share of loans for investment	Large firms	49.82%	72.93%	4.26	0.01**
Share of secured loans	SMEs	81.48%	49.27%	-3.01	0.03**
Share of secured loans	Large firms	74.85%	42.80%	-2.92	0.03**
Loan fees	SMEs	0.96%	0.37%	-2.90	0.02**
Loan rees	Large firms	0.83%	0.22%	-3.23	0.00***
Interest rates on best clients	SMEs	11.16%	4.66%	-5.28	0.00***
interest rates on best chemis	Large firms	10.22%	4.00%	-5.32	0.00***
Interest notes on views dients	SMEs	15.65%	8.79%	-3.96	0.00***
Interest rates on worst clients	Large firms	14.09%	7.30%	-4.21	0.00***
Chara of non marfarmina loans	SMEs	6.49%	6.93%	0.14	0.89
Share of non-performing loans	Large firms	4.13%	2.54%	-1.19	0.25

^{*, ***, ***} indicate significance at the 10, 5, and 1 percent levels, respectively

Figure 1
Loan exposure to SMEs and large firms

Figure shows the percentage of Ioans directed to SMEs (bars) and large firms (triangles). Data reported for individual countries was obtained by taking the weighted average across banks in the country, where the weight is given by the loan market share of each bank among all banks for which we have data. We only report data for countries where at least 2 banks responded and the market share of respondents was greater than 30 percent. Mean for banks operating in developed and, separately, developing countries are not weighted and include all banks that responded to our survey, independent of their market share. Data come from the survey of banks conducted electronically by the authors.

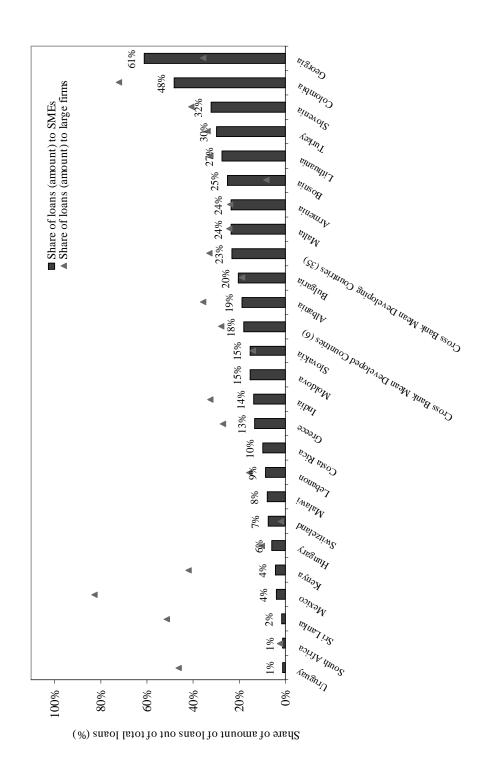


Figure 2 Share of loan applications approved for SME and large firm loans

Figure shows the percentage of applications approved among SME (bars) and large (triangles) firm loan applications. Data reported for individual countries was obtained by taking the weighted average across banks in the country, where the weight is given by the loan market share of each bank among all banks for which we have data. We only report data for countries where at least 2 banks responded and the market share of respondents was greater than 30 percent. Mean for banks operating in developed and, separately, developing countries are not weighted and include all banks that responded to our survey, independent of their market share. Data come from the survey of banks conducted electronically by the authors.

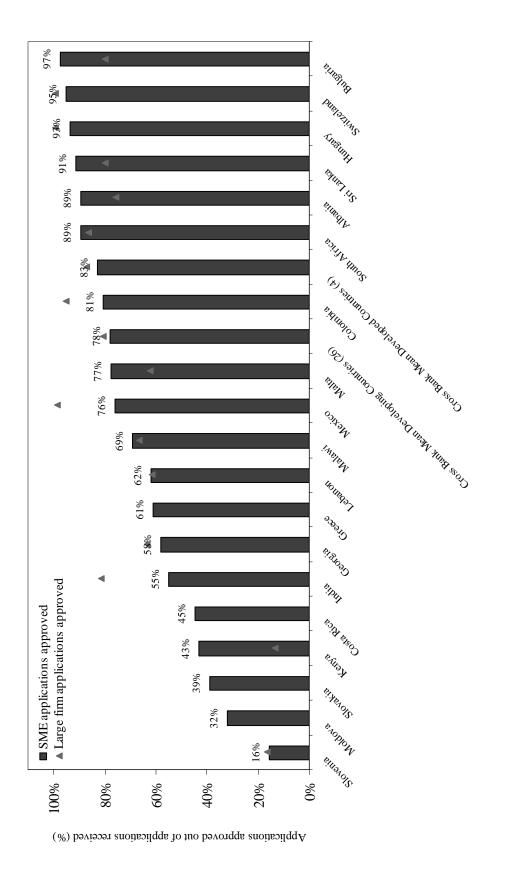


Figure 3
Share of investment loans among SME and large firm loans

Figure shows the percentage of investment loans among SME (bars) and large (triangles) firm loans. Data reported for individual countries was obtained by taking the weighted average across banks in the country, where the weight is given by the loan market share of each bank among all banks for which we have data. We only report data for countries where at least 2 banks responded and the market share of respondents was greater than 30 percent. Mean for banks operating in developed and, separately, developing countries are not weighted and include all banks that responded to our survey, independent of their market share. Data come from the survey of banks conducted electronically by the authors.

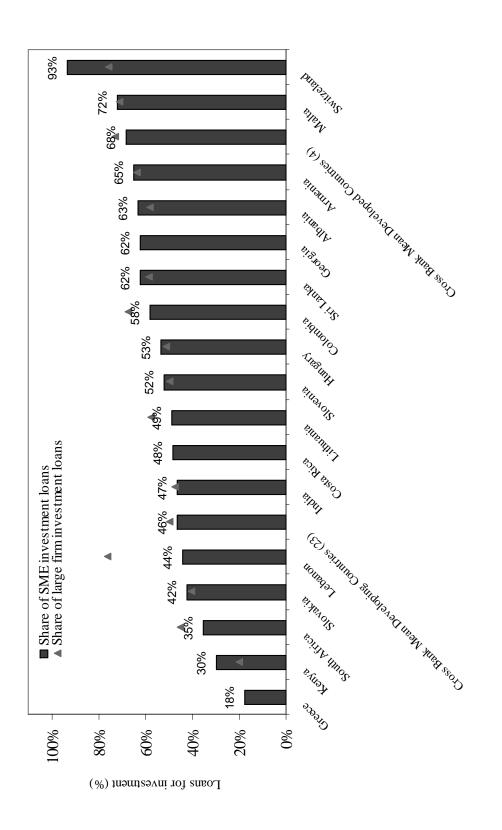


Figure 4
Share of secured loans among SME and large firm loans

Figure shows the percentage of secured loans among SME (bars) and large (triangles) firm loans. Data reported for individual countries was obtained by taking the weighted average across banks in the country, where the weight is given by the loan market share of each bank among all banks for which we have data. We only report data for countries where at least 2 banks responded and the market share of respondents was greater than 30 percent. Mean for banks operating in developed and, separately, developing countries are not weighted and include all banks that responded to our survey, independent of their market share. Data come from the survey of banks conducted electronically by the authors.

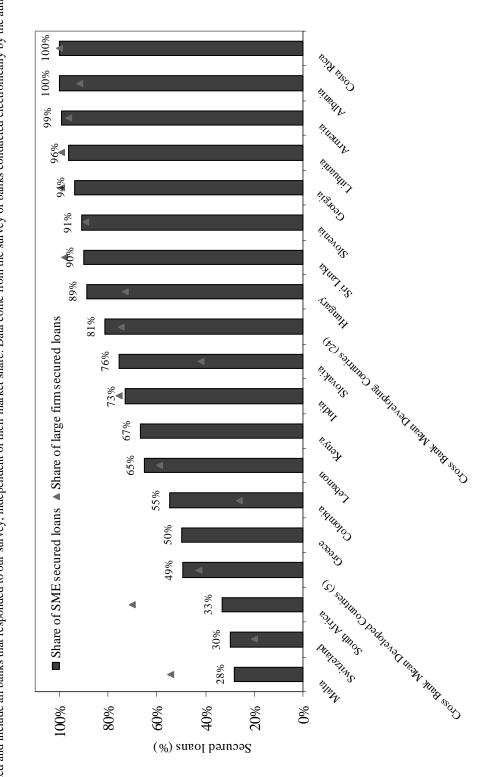


Figure 5
Fees charged on SME and large firm loans

Figure shows the fees on SME (bars) and large firm (triangles) loans. Data reported for individual countries was obtained by taking the weighted average across banks in the country, where the weight is given by the loan market share of each bank among all banks for which we have data. We only report data for countries where at least 2 banks responded and the market share of respondents was greater than 30 percent. Mean for banks operating in developed and, separately, developing countries are not weighted and include all banks that responded to our survey, independent of their market share. Data come from the survey of banks conducted electronically by the authors.

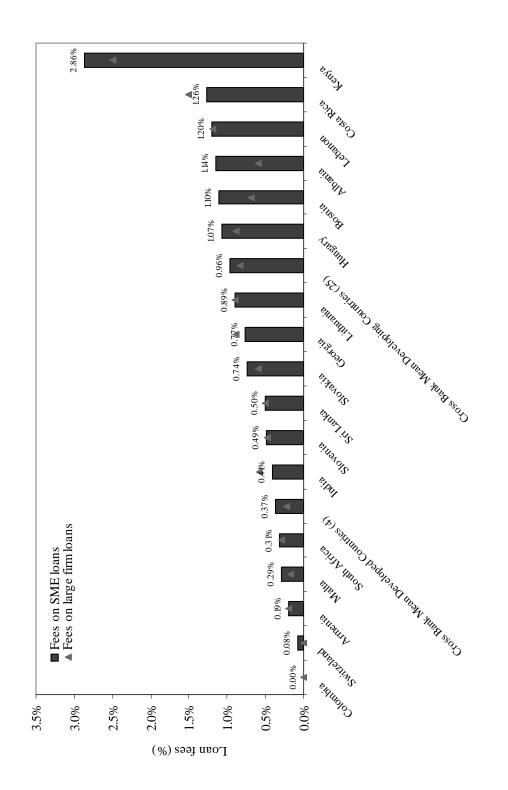


Figure 6 Interest rates charged on best (lowest risk) SME and large firm loans

weighted average across banks in the country, where the weight is given by the loan market share of each bank among all banks for which we have data. We only report data for countries where at least 2 banks responded and the market share of respondents was greater than 30 percent. Mean for banks operating in developed and, separately, developing countries are not weighted and include all banks that responded to our survey, independent of their market share. Data come from the survey of banks conducted electronically by Figure shows the interest rates charged on the best (lowest risk) SME (bars) and large firm (triangles) loans. Data reported for individual countries was obtained by taking the

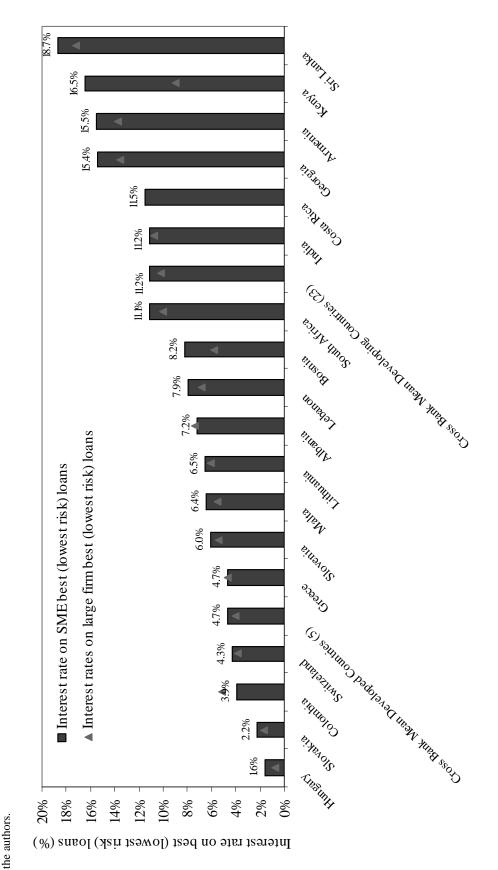


Figure 7 Interest rates charged on worst (highest risk) SME and large firm loans

Figure shows the interest rates charged on the best (highest risk) SME (bars) and large firm (triangles) loans. Data reported for individual countries was obtained by taking the weighted average across banks in the country, where the weight is given by the loan market share of each bank among all banks for which we have data. We only report data for countries where at least 2 banks responded and the market share of respondents was greater than 30 percent. Mean for banks operating in developed and, separately, developing countries are not weighted and include all banks that responded to our survey, independent of their market share. Data come from the survey of banks conducted electronically by the authors.

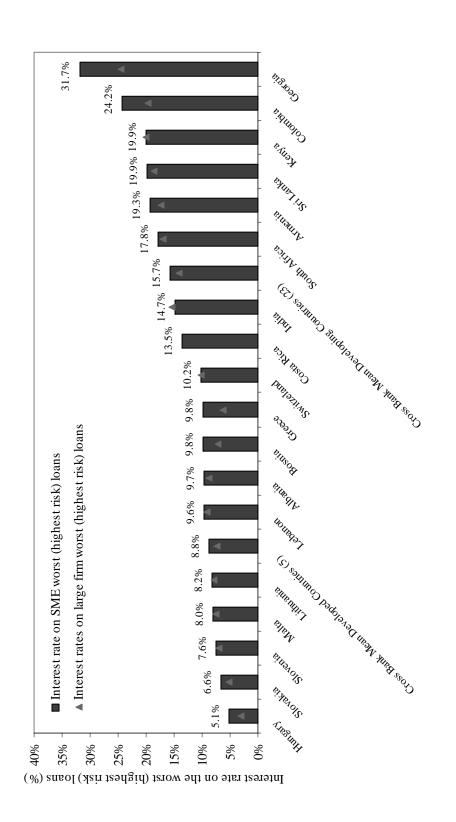


Figure 8
Share of SME and large firm non-performing loans

Figure shows the percentage of SME (bars) and large firm (triangles) non-performing loans. Data reported for individual countries was obtained by taking the weighted average across banks in the country, where the weight is given by the loan market share of each bank among all banks for which we have data. We only report data for countries where at least 2 banks responded and the market share of respondents was greater than 30 percent. Mean for banks operating in developed and, separately, developing countries are not weighted and include all banks that responded to our survey, independent of their market share. Data come from the survey of banks conducted electronically by the authors.

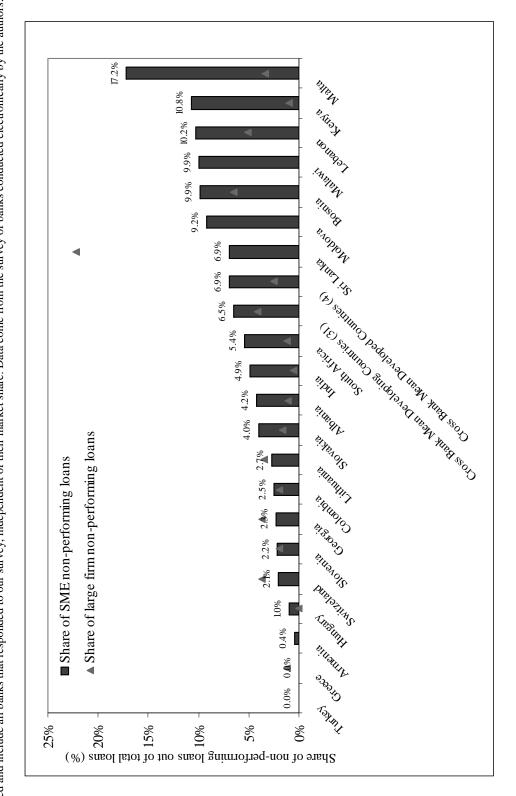
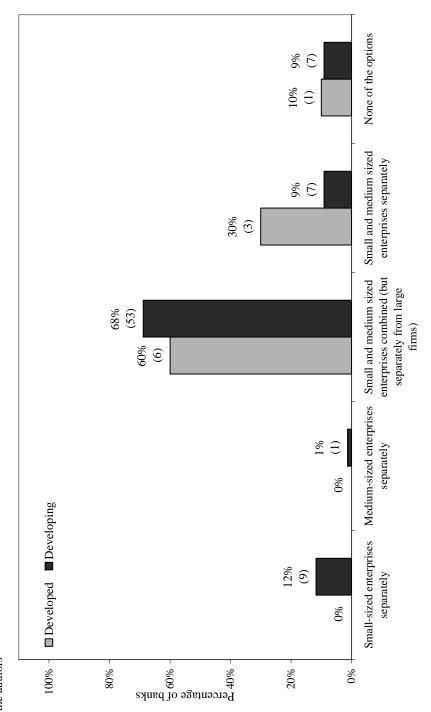


Figure 9
Banks' organizational set up to serve SMEs

This figure is based on banks' responses to the question "Please indicate (with a 'Yes' or 'No') whether your bank has a separate department that attends to: Small-sized enterprises separately, Medium-sized enterprises separately and Small and Medium sized enterprises separately. We show the percentage of banks that answered 'Yes' to each of the options given as possible responses. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors

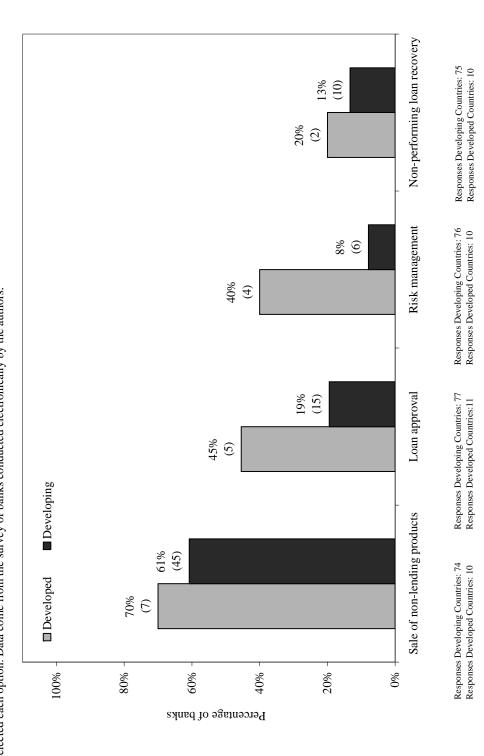


Total Responses Developing Countries: 77 Total Responses Developed Countries:10

42

Figure 10 Extent of decentralization in banks' set up to serve small enterprises

This figure is based on banks' responses to the question "What aspects of the small enterprise banking business are decentralized (only done at branches and done primarily at the branches) and at what level?". We show the percentage of banks that chose each of the options given as possible responses. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.



Extent of decentralization in banks' set up to serve medium-sized enterprises Figure 11

This figure is based on banks' responses to the question "What aspects of the medium-sized enterprise banking business are decentralized (only done at branches and done primarily at the branches) and at what level?". We show the percentage of banks that chose each of the options given as possible response. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.

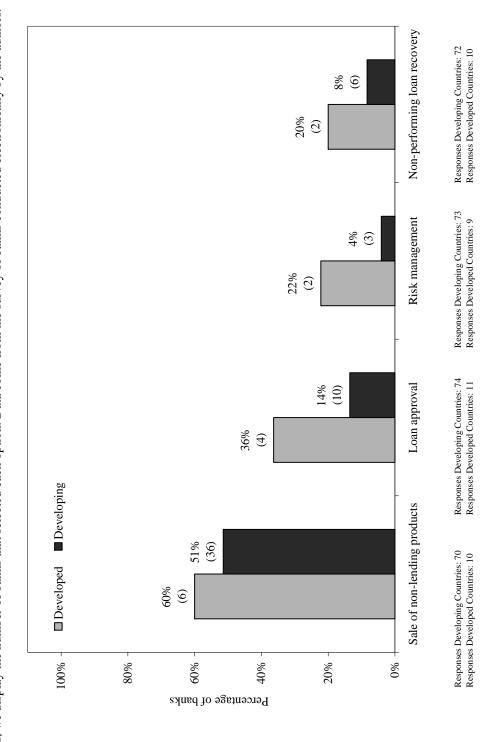
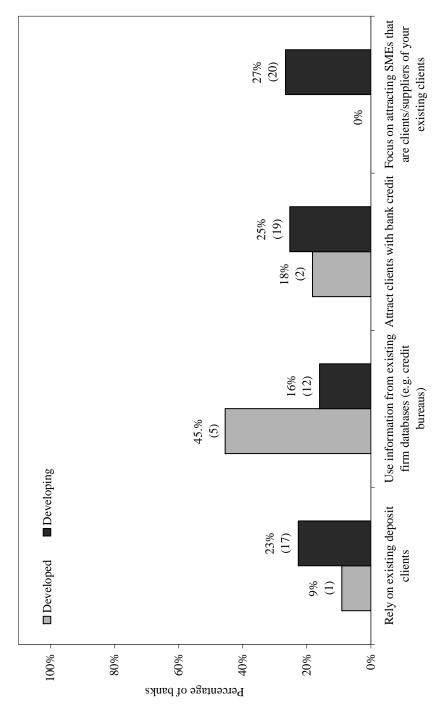


Figure 12 Ways in which banks reach out to potential SME clients

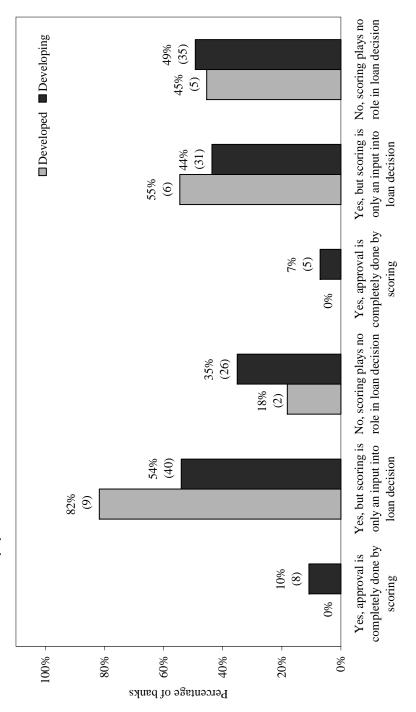
following possible ways of identifying clients". We show the percentage of banks that ranked each of the options as the most important (i.e., percentage that ranked each option "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors. Because not This figure is based on banks' responses to the question "How do you identify potential SME clients? Rank from 1 to 5 (with 1 being the most important) the importance of the all the banks have ranked an option "1", adding all banks will not equal 100 percent.



Total Responses Developing Countries: 75 Total Responses Developed Countries: 11

Figure 13
Banks' use of scoring models in SME lending

This figure is based on banks' responses to the question "Does your bank use scoring models to approve loans to small-sized or medium-sized enterprises?". We show the percentage of banks that chose each of the options given as possible responses. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.



Small -sized Enterprises

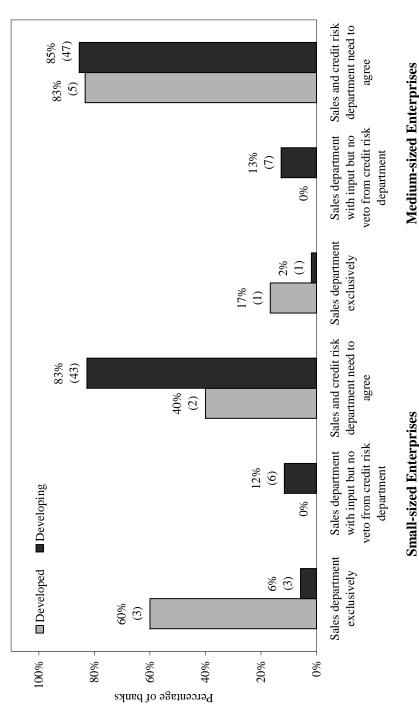
Medium-sized Enterprises

Total Responses Developing Countries: 74 (Small Enterprises) Total Responses Developed Countries: 11

Total Responses Developing Countries: 71 (Medium Enterprises) Total Responses Developed Countries: 11

SME loan approval procedures Figure 14

This figure is based on banks' responses to the question "If you do not use scoring models in small-sized (SE) or medium-sized (ME) enterprises loan approval, who approves these loans?". We show the percentage of banks that chose each of the options given as possible responses. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.



Small-sized Enterprises

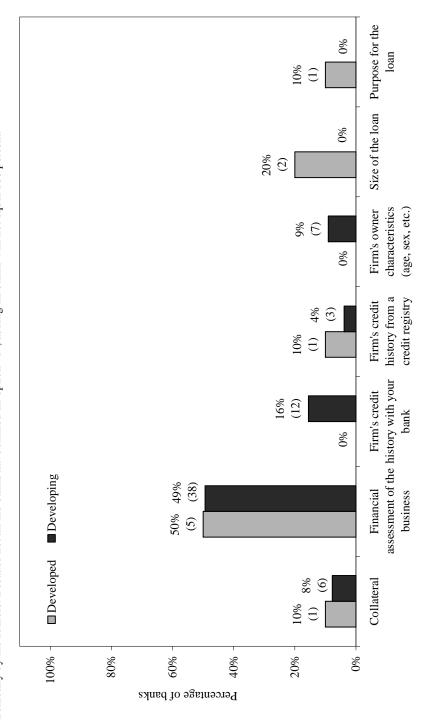
Total Responses Developing Countries: 52 (Small Enterprises)

Total Responses Developed Countries: 5 (Small Enterprises)

Total Responses Developing Countries: 55 (Medium Enterprises) Total Responses Developed Countries: 6 (Medium Enterprises)

Figure 15 Criteria used by banks to evaluate small enterprise loans

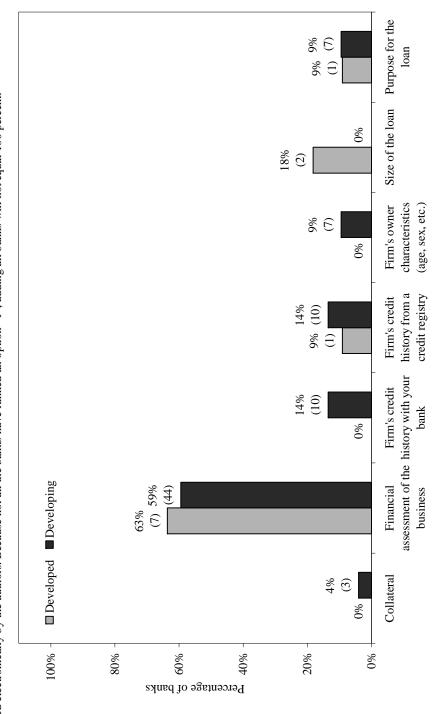
This figure is based on banks' responses to the question "Please indicate how important are for your bank the following factors in making decisions regarding business loans to small enterprises." Rank importance from 1 to 8 (with 1 being the most important)." We show the percentage of banks that ranked each of the options given as the most important (i.e., the percentage that ranked each option as "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors. Because not all the banks have ranked an option "1", adding all banks will not equal 100 percent.



Total Responses Developing Countries: 77 Total Responses Developed Countries: 10

Figure 16 Criteria used by banks to evaluate medium-sized enterprise loans

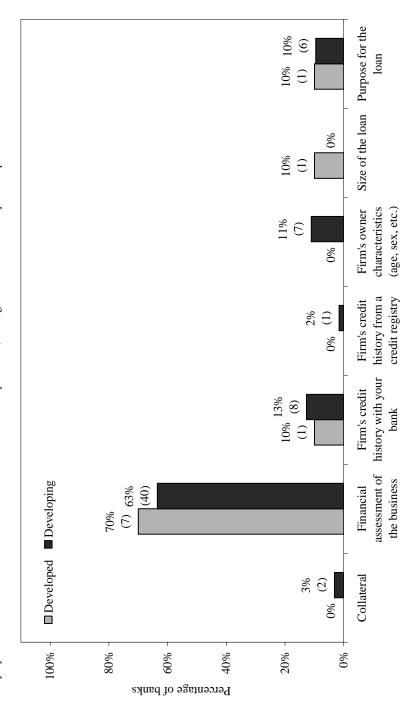
This figure is based on banks' responses to the question "Please indicate how important are for your bank the following factors in making decisions regarding business loans to medium-sized enterprises" Rank importance from 1 to 8 (with 1 being the most important)". We show the percentage of banks that ranked each of the options given as the most important (i.e., the percentage that ranked each option as "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors. Because not all the banks have ranked an option "1", adding all banks will not equal 100 percent.



Total Responses Developing Countries: 74 Total Responses Developed Countries: 11

Figure 17 Criteria used by banks to evaluate large enterprise loans

This figure is based on banks' responses to the question "Please indicate how important are for your bank the following factors in making decisions regarding business loans to large enterprises" Rank importance from 1 to 8 (with 1 being the most important)". We show the percentage of banks that ranked each of the options given as the most important (i.e., the percentage that ranked each option as "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors. Because not all the banks have ranked an option "1", adding all banks will not equal 100 percent.



Total Responses Developing Countries: 63 Total Responses Developed Countries: 10

Figure 18
Banks' use of collateral in business lending

This figure is based on banks' responses to the question "Do you require collateral?". We show the percentage of banks that answered 'Yes'. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.

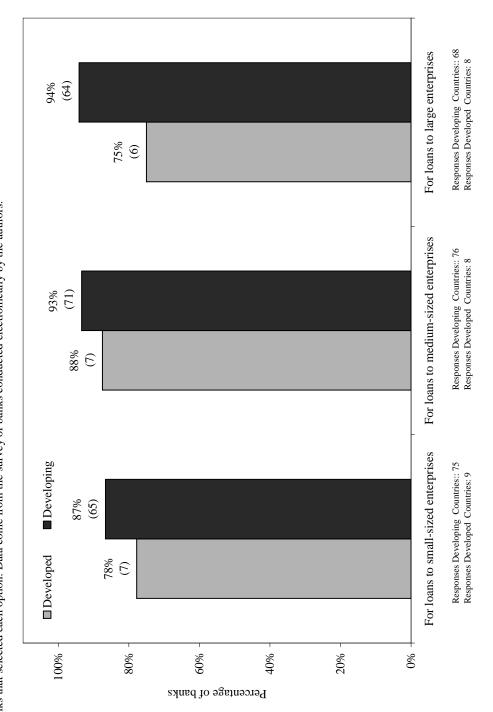
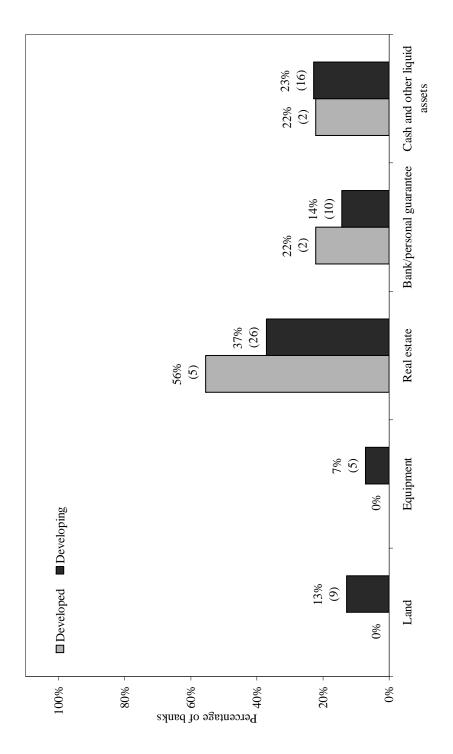


Figure 19
Types of collateral used for small enterprise lending

This figure is based on banks' responses to the question "What types of assets are commonly used as collateral for small business lending? Rank importance from 1 to 7 (with 1 being the most important)". We show the percentage of banks that ranked each of the options given as the most important (i.e., the percentage that ranked each option "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors. Because not all the banks have ranked an option "1", adding all banks will not equal 100 percent.

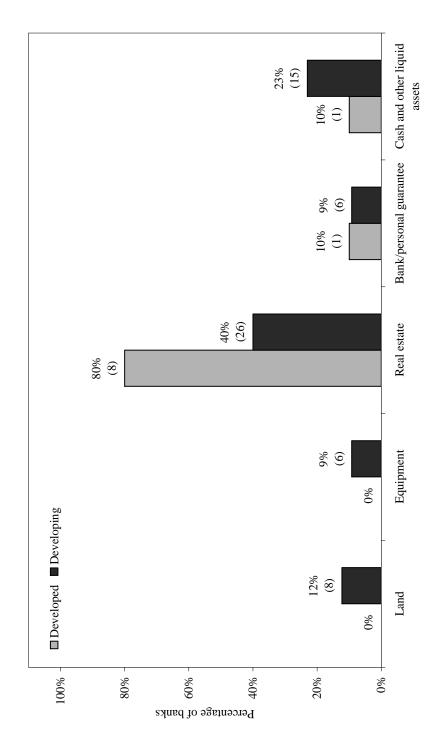


Total Responses Developing Countries:: 70 Total Responses Developed Countries: 9

Figure 20 Types of collateral used for medium-sized enterprise lending

Types of collateral used for medium-sized enterprise lending

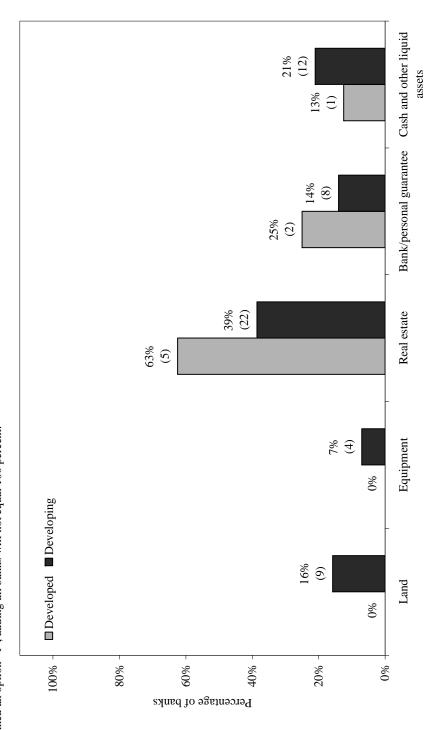
This figure is based on banks' responses to the question "What types of assets are commonly used as collateral for medium-sized business lending? Rank importance from 1 to 7 (with 1 being the most important)". We show the percentage of banks that ranked each of the options given as the most important (i.e., the percentage that ranked each option "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors. Because not all the banks have ranked an option "1", adding all banks will not equal 100 percent.



Total Responses Developing Countries::65 Total Responses Developed Countries: 10

Figure 21
Types of collateral used for large enterprise lending

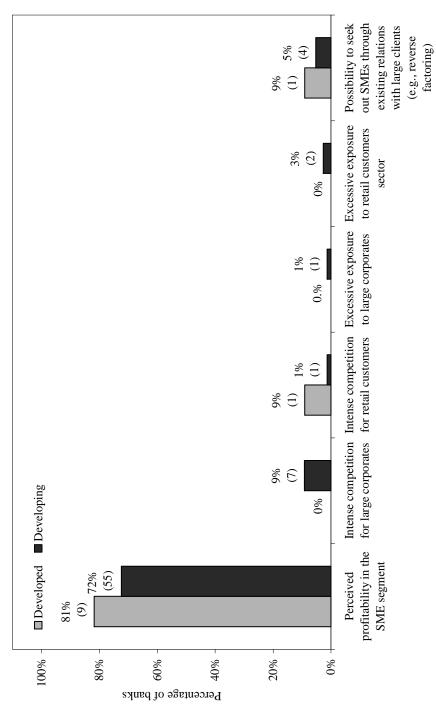
This figure is based on banks' responses to the question "What types of assets are commonly used as collateral for large business lending? Rank importance from 1 to 7 (with 1 being the most important)". We show the percentage of banks that ranked each of the options given as the most important (i.e., the percentage that ranked each option "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors. Because not all the banks have ranked an option "1", adding all banks will not equal 100 percent.



Total Responses Developing Countries::57
Total Responses Developed Countries: 8

Figure 22 Banks' perceptions of the drivers of SME lending

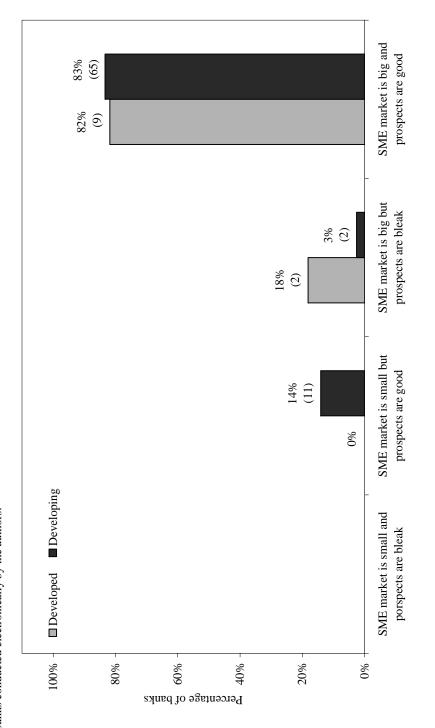
This figure is based on banks' responses to the question "To what degree is your involvement with SMEs driven by the following? Rank importance from 1 to 7 (with 1 being the most important)". We show the percentage of banks that ranked each of the options given as the most important (i.e., the percentage that ranked each option as "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors. Because not all the banks have ranked an option "1", adding all banks will not equal 100 percent.



Total Responses Developing Countries: 76 Total Responses Developed Countries: 11

Figure 23
Banks' perceptions of the size and prospects of the SME market

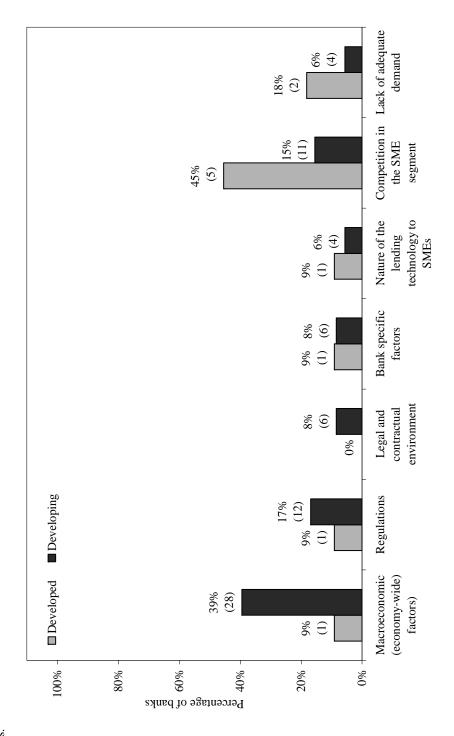
This figure is based on banks' responses to the question "What is your view on the size and prospects for the SME market in general, not just for your bank?". We show the percentage of banks that chose each of the options given as possible response. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.



Total Responses Developing Countries: 78 Total Responses Developed Countries: 11

Figure 24
Banks' perceptions on the obstacles on SME lending

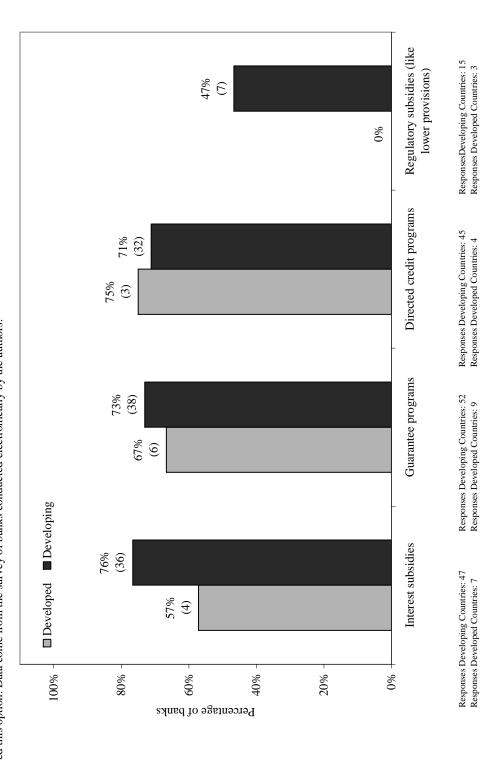
This figure is based on banks' responses to the question "Indicate to what degree the following factors are important <u>obstacles</u> to your exposure to/involvement with SMEs and rank important to 8 (with 1 being the most important)." We show the percentage of banks that ranked each of the options given as the most important (i.e., the percentage that ranked each option as "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.



Total Responses Developing Countries: 71 Total Responses Developed Countries: 11

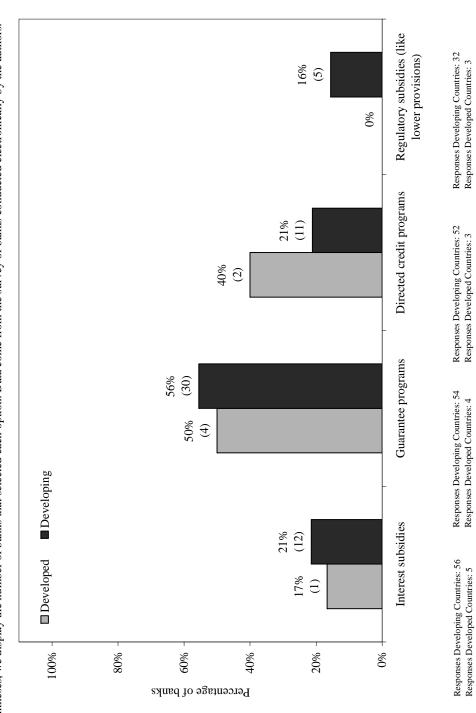
Figure 25 Banks' attitude towards government programs to promote SME financing

This figure is based on banks' responses to the question "Please comment on the effect of the following government programs on your involvement with SMEs. Also, within parentheses, we display the number of banks percentage of banks that rate government programs as having a "positive" impact on bank's involvement with SMEs. Also, within parentheses, we display the number of banks that selected this option. Data come from the survey of banks conducted electronically by the authors.



Banks' ranking of government programs to promote SME financing Figure 26

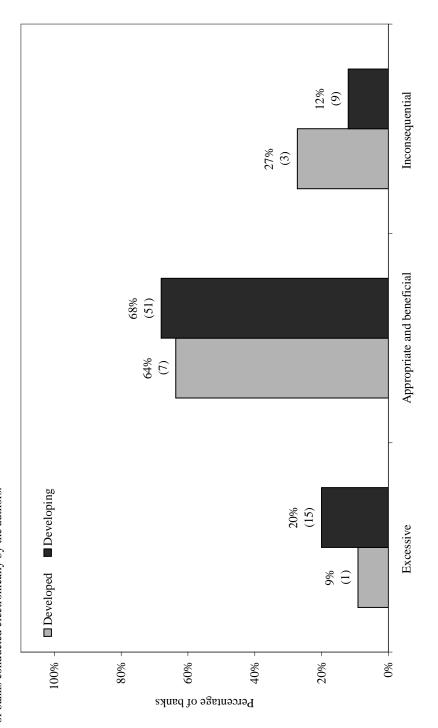
This figure is based on banks' responses to the question "Rank the importance from 1 to 5 (with 1 being the most important) of the following government programs in influencing your involvement with SMEs. We show the percentage of banks that ranked each of the options given as the most important (i.e., the percentage that ranked each option as "1"). Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.



Responses Developed Countries: 3

Figure 27

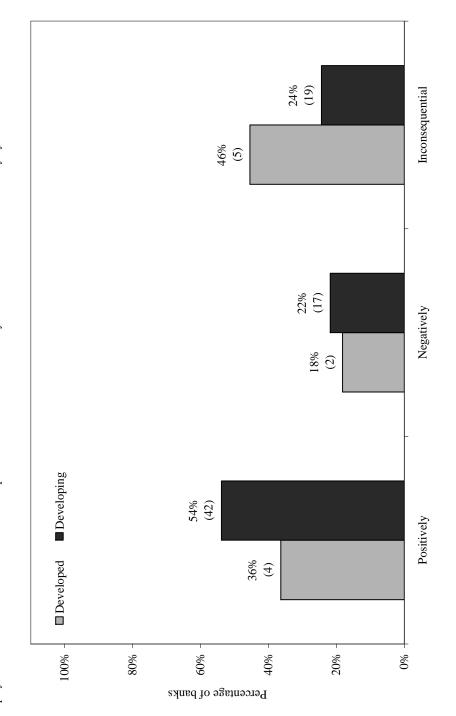
Banks' impression of the burden posed by documentation requirements for lending to SMEs. We show the This figure is based on banks' responses to the question "Give your impression on the burden posed by documentation requirements (if any) for lending to SMEs". We show the percentage of banks that chose each of the options given as possible responses. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.



Total Responses Developing Countries: 75 Total Responses Developed Countries: 11

Banks' impression of how prudential regulations affect their involvement with SMEs Figure 38

This figure is based on banks' responses to the question "How do prudential regulations (capital requirements, regulations concerning loan classification, regulations concerning loan documentation, etc.) affect your involvement with SMEs?". We show the percentage of banks that chose each of the options given as possible responses. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.



Total Responses Developing Countries: 78 Total Responses Developed Countries: 11

Figure 29

Banks' perception of whether the existence of a credit bureau facilitate SME lending

This figure is based on banks' responses to the question "Does the existence of a credit bureau in your country facilitate SME lending?". We show the percentage of banks that chose each of the options given as possible responses. Also, within parentheses, we display the number of banks that selected each option. Data come from the survey of banks conducted electronically by the authors.

